

TITLE OF THE INVENTION
A SEMICONDUCTOR DEVICE AND
A METHOD OF PRODUCING THE SAME
ABSTRACT OF THE DISCLOSURE

5 In an integrated pressure sensor including a semiconductor
substrate having a p type single crystal silicon substrate and an n
type epitaxial layer of which a portion is etched by electrochemical
etching to have a diaphragm, an impurity diffusion layer piercing
the n type epitaxial layer at least defining the diaphragm is formed
10 for isolation. An etching wire is formed on the surface of the n type
epitaxial layer with insulation and the first end of the etching wire
extends to the inside of the surface and connected to the n type
epitaxial layer. The second opposite end extends to an edge of the
semiconductor substrate. The etching wire does not cross the
15 impurity layer inside the surface of the semiconductor substrate to
prevent the etching wire from short-circuiting with the impurity
diffusion layer during the electrochemical etching.